

**Iowa Department of Natural Resources
Environmental Protection Commission**

ITEM

8

DECISION

TOPIC

Final Rule: Chapter 28 - Update to Ambient Air Quality Standards

The Department is requesting that the Commission adopt an amendment to Chapter 28 "Ambient Air Quality Standards" of the 567 Iowa Administrative Code.

The purpose of the amendment is to adopt into the state air quality rules revisions to federal ambient air quality standards that EPA finalized on October 17, 2006.

The Notice of Intended Action was published in the Iowa Administrative Bulletin (IAB) on January 31, 2007, as ARC 5692B. A public hearing was held on March 5, 2007. No oral or written comments were received at the public hearing. The EPA submitted the only written comment during the public comment period, which closed on March 9, 2007. A summary of the comment and the Department's response to the comment is provided in the attached public responsiveness summary. A change was made to the published notice of intended action as described in the public responsiveness summary and in the rule preamble to address EPA's comment.

These revisions address fine particulate matter, which is 2.5 micrometers in diameter and smaller (PM2.5), and inhalable coarse particulate matter which is 10 micrometers and smaller in diameter (PM10). EPA strengthened the 24-hour PM2.5 standard from the 1997 level of 65 micrograms per cubic meter of air to 35 micrograms per cubic meter of air. EPA retained the current annual PM2.5 standard at 15 micrograms per cubic meter of air. EPA also retained the existing 24-hour PM10 standard of 150 micrograms per cubic meter of air, but revoked the annual PM10 standard.

The department will be required to make PM2.5 attainment or nonattainment designations for the state by December 2007. EPA will review the department's designations and make its own PM2.5 designations by December 2009. The EPA designations will become final in April 2010.

An administrative rules fiscal impact statement is attached.

Jim McGraw
Environmental Program Supervisor
Program Development Section, Air Quality Bureau
Memo date: August 13, 2007

ENVIRONMENTAL PROTECTION COMMISSION [567]

Adopted and Filed

Pursuant to the authority of Iowa Code section 455B.133(3), the Environmental Protection Commission hereby adopts amendments to Chapter 28, “Ambient Air Quality Standards,” Iowa Administrative Code.

The purpose of the amendment is to adopt into the state air quality rules revisions to federal ambient air quality standards for particulate matter that the U.S. Environmental Protection Agency (EPA) finalized on October 17, 2006.

The Notice of Intended Action was published in the Iowa Administrative Bulletin (IAB) on January 31, 2007, as ARC 5692B. A public hearing was held on March 5, 2007. No oral or written comments were received at the public hearing. The EPA submitted the only written comment during the public comment period, which closed on March 9, 2007. A summary of EPA’s comment and the Department’s response to the comment is provided in a public responsiveness summary available from the department upon request. The adopted amendment was modified as described below from the proposed amendment published under the Notice of Intended Action to address EPA’s comment.

The amendment changes rule 567—28.1(455B) by citing the Federal Register notice and corresponding Federal Register page numbers and promulgation date for the revisions made by EPA to the national primary and secondary ambient air quality standards, as published in 40 Code of Federal Regulations (CFR) Part 50 on October 17, 2006.

These revisions address fine particulate matter 2.5 micrometers in diameter and smaller (PM_{2.5}), and inhalable coarse particulate matter which is 10 micrometers and smaller in diameter (PM₁₀). EPA strengthened the 24-hour PM_{2.5} standard from the 1997 level of 65 micrograms

per cubic meter of air to 35 micrograms per cubic meter of air. EPA retained the current annual PM_{2.5} standard at 15 micrograms per cubic meter of air. EPA also retained the existing 24-hour PM₁₀ standard of 150 micrograms per cubic meter of air, but revoked the annual PM₁₀ standard.

The Department will be required to make PM_{2.5} attainment or nonattainment designations for the state by December 2007. EPA will review the Department's designations and make its own PM_{2.5} designations by December 2009. The EPA designations will become final in April 2010.

As stated in the preamble of the published notice, the Department initially concluded that it was no longer necessary to conduct air dispersion modeling or set air construction permit limits for the annual PM₁₀ standard since EPA had revoked the annual PM₁₀ standard. Written comments received from EPA stated that EPA's 1997 interim PM_{2.5} implementation policy for new source review (NSR) continues to instruct that PM₁₀ should be used as a surrogate for PM_{2.5} until such time that EPA has a final implementation rule for PM_{2.5}. If the revocation of the annual PM₁₀ standard was adopted as proposed in the Notice of Intended Action, the Department would remove its only mechanism to implement EPA's interim PM_{2.5} policy for air dispersion modeling review of annual PM_{2.5} impacts. Since monitored values of the annual PM₁₀ standard will not be used to determine the PM₁₀ attainment or non-attainment status of an area, the Department has also concluded that the continued use of the annual PM₁₀ standard as a surrogate for the annual PM_{2.5} standard for NSR purposes does not conflict with Iowa statute provisions regarding adoption of state air quality rules that are more stringent than federal regulations.

To address this issue until such time as final PM_{2.5} implementation guidance is promulgated by EPA, the Department has amended the Chapter 28 language proposed in the Notice of Intended Action to add language clarifying that the annual PM₁₀ standard shall continue to be applied for purposes of implementation of new source permitting provisions in 567 IAC Chapters 22 and 33. Since the Department continues to implement EPA's 1997 interim implementation guidance for PM_{2.5}, the Department believes that this change from what was published in the Notice of Intended Action is within the scope of the published notice and is a logical outgrowth of EPA's comment on the published notice.

This amendment is intended to implement Iowa Code section 455B.133. This amendment will become effective on October 31, 2007.

The following amendment is adopted.

Amend rule 567—28.1(455B) as follows:

567—28.1(455B) Statewide standards. The state of Iowa ambient air quality standards shall be the National Primary and Secondary Ambient Air Quality Standards as published in 40 Code of Federal Regulations Part 50 (1972) and as amended at 38 Federal Register 22384 (September 14, 1973), 43 Federal Register 46258 (October 5, 1978), 44 Federal Register 8202, 8220 (February 9, 1979), 52 Federal Register 24634-24669 (July 1, 1987), ~~and~~ 62 Federal Register 38651-38760, 38855-38896 (July 18, 1997), and 71 Federal Register 61144-61233 (October 17, 2006), except that the annual PM-10 standard specified in 40 CFR Section 50.6(b) shall continue to be applied for purposes of implementation of new source permitting provisions in 567 IAC Chapters 22 and 33. The department shall implement these rules in a time frame and schedule consistent with implementation schedules in federal laws, regulations and guidance documents. This rule is intended to implement Iowa Code section 455B.133.

Date

Richard A. Leopold, Director

Administrative Rule Fiscal Impact Statement

Date: August 8, 2007

Agency: Natural Resources
IAC Citation: 567 IAC Chapter 28
Rules Contact: Anne Preziosi

Summary of the Rule: The purpose of the proposed rule change is to adopt into the state air quality rules revisions to federal ambient air quality standards that were finalized by EPA on October 17, 2006. These revisions addressed fine particulate matter, which is 2.5 micrometers in diameter and smaller (PM_{2.5}), and inhalable coarse particulate matter which is 10 micrometers and smaller in diameter (PM₁₀). EPA strengthened the 24-hour PM_{2.5} standard from the 1997 level of 65 micrograms per cubic meter of air to 35 micrograms per cubic meter of air. EPA also retained the existing 24-hour PM₁₀ standard of 150 micrograms per cubic meter of air but revoked the annual PM₁₀ standard.

Fill in this box if the impact meets these criteria:

- ☐ No Fiscal Impact to the State.
- ☐ Fiscal Impact of less than \$100,000 annually or \$500,000 over 5 years.
- ☐ Fiscal Impact cannot be determined.

Brief Explanation:

Fill in the form below if the impact does not fit the criteria above:

- ☒ Fiscal Impact of \$100,000 annually or \$500,000 over 5 years.

* Fill in the rest of the Fiscal Impact Statement form.

Assumptions:

Expenditures:

FY 2008 costs for ambient monitoring of the new PM2.5 standard that will meet the federal reference methods are estimated as follows:

Operations and maintenance- \$700,000

Equipment costs- \$170,000

Laboratory analysis- \$195,000

Total: \$1,065,000.

This is a \$675,000 increase in expenses for PM2.5 monitoring from FY 2007 due to new costs and changes in the federal program. The increase is due primarily to the need to install some new equipment to meet the new federal reference method mandated in the federal regulations and requirements for an increase in the frequency of monitoring at some monitor sites.

Revenues:

Based on stable federal funding, no additional federal funds are anticipated for the increased PM2.5 monitoring expenses.

Approximately \$400,000 of the \$675,000 increase will be paid for through an increase in the Title V operating permit fee. This fee is based on tons of regulated air pollutant emitted on a calendar year basis from sources that are classified as major sources under the Clean Air Act. There are approximately 290 major sources in Iowa. Assuming 235,000 tons statewide of air pollutant emitted with no offsetting decreases in expenditures that are paid for with Title V fees, this equates to an increase of \$1.75 per ton of air pollutant emitted.

The remaining \$275,000 of the \$675,000 would be paid for with the ambient monitoring money previously allocated to Animal Feeding Operation (AFO) monitoring. The department has requested that this funding be directed to monitoring for the PM2.5 standard.

On-going operation and maintenance of the PM2.5 monitoring network is expected to require increased expenditures of approximately six percent annually, including FY 2009.

It is anticipated that any changes that may need to be made to the PM2.5 monitoring network in FY 2007 due to the new standard will be paid for out of the monies already budgeted to the department for FY 2007.

There has been on-going uncertainty on the future of the federal grants. Based on the above expenditure assumptions, if the federal support is reduced, additional general funds on the order of \$475,000 could be needed to offset the shortfall.

Describe how estimates were derived:

Estimates for expenditures were derived from current information available from the department's Ambient Air Monitoring Unit and the University of Iowa Hygienic Lab (UHL).

Estimated Impact to the State by Fiscal Year

	<u>Year 1 (FY08)</u>	<u>Year 2 (FY09)</u>
Revenue by Each Source:		
GENERAL FUND	\$275,000	\$291,500
FEDERAL FUNDS		
Other (specify)		
Air Title V funds		
	<u>\$400,000</u>	<u>\$424,000</u>
TOTAL REVENUE	<u>\$675,000</u>	<u>\$715,500</u>
Expenditures:		
GENERAL FUND	\$275,000	\$291,500
FEDERAL FUNDS		
Other (specify)		
Air Title V funds		
	<u>\$400,000</u>	<u>\$424,000</u>
TOTAL EXPENDITURES	<u>\$675,000</u>	<u>\$715,500</u>
NET IMPACT	\$0	\$0

X This rule is required by State law or Federal mandate.

Please identify the state or federal law:

Clean Air Act sections 108 and 109 and Iowa Code 455B.133(3).

 Funding has been provided for the rule change.

Please identify the amount provided and the funding source:

X Funding has not been provided for the rule.

Please explain how the agency will pay for the rule change:

The agency plans to use additional Title V funds and a redirection of money currently being used for air AFO monitoring to pay for the additional expenses for monitoring of the new PM2.5 federal standard.

Fiscal impact to persons affected by the rule:

The federal ambient air quality standards for particulate matter apply across the state whether or not the state incorporates these federal standards into the Iowa Administrative Code. The state is required to adopt and implement the federal ambient air quality standards through the state implementation plan. Monitoring related to the implementation of this rule is essential to determine if Iowa will fall into PM 2.5 non-attainment designation.

Regarding PM2.5, it is possible that some areas of the state may be found through ambient air monitoring to be in non-attainment of the PM2.5 standard. The state will be required to develop and implement an emissions reduction plan to bring the areas of monitored PM2.5 non-attainment back into attainment with the PM2.5 standard. A declaration of non-attainment will adversely impact economic development in the non-attainment area. Non-attainment would lead to increased business costs, less likelihood of investment by new or expanding facilities, and a compromised economic climate for business growth.

There is no standard cost of non-attainment. The cost to the area is based on the extent of the non-attainment and the emissions reductions plan. New facilities would be required to install more stringent emissions controls than before. Existing facilities would need to reduce emissions to provide offsets for new sources and for any planned expansions that would increase emissions. Emissions may also need to be reduced in nearby areas that contribute to non-attainment area. Consumers and residents in the non-attainment area could experience an increase in costs due to the increased regulatory burden.

Fiscal impact to Counties or other Local Governments (required by Iowa Code 25B.6):

Counties or local governments may be economically impacted if some areas of the state are found to be in non-attainment of the PM2.5 standard. The extent of the impact can not be determined at this time.

* If additional explanation is needed, please attach extra pages.

Agency Representative preparing estimate: Jim McGraw
Telephone Number: 515-242-5167

**PUBLIC PARTICIPATION RESPONSIVENESS SUMMARY
FOR
567 Iowa Administrative Code Chapter 28 Ambient Air Quality Standards**

Introduction

The Notice of Intended Action was published in the Iowa Administrative Bulletin (IAB) on January 31, 2007, as ARC 5692B. A public hearing was held on March 5, 2007. No oral or written comments were received at the public hearing. One written comment was received before the public comment period closed on March 9, 2007. A summary of the comment and the department's response is provided below.

Public Comment #1

A summary of written comments submitted by Heather Hamilton, U.S. Environmental Protection Agency Region 7, 901 North 5th Street, Kansas City, KS 66101.

The proposed rule adds the October 17, 2006 Federal Register notice entitled "National Ambient Air Quality Standards for Particulate Matter" that updates the PM standards and by doing so, revokes the annual particulate matter (PM)-10 standard. The concern is that EPA's interim policy states that PM-10 should be used as a surrogate for PM2.5 until such time that EPA has a final implementation rule for PM2.5.

The final PM2.5 implementation rule will inform the states of how to implement PM2.5 for New Source Review. If the proposed rule were adopted in current form, the revocation of the annual PM-10 standard could inhibit the state's ability to implement the interim guidance. We recommend that you determine, prior to finalizing the rule, that it will not interfere with your ability to review projects for annual PM2.5 impacts. One option would be to state in the rule that the annual PM-10 standard will continue to be applicable for purposes of new source review.

Department Response

When the department began this rulemaking it was believed that EPA would finalize its PM2.5 implementation guidance prior to the department proposing final adoption of the rule. The EPA subsequently finalized and published PM2.5 implementation guidance for non-attainment areas. Implementation guidance for attainment areas, including guidance related to New Source Review, has been proposed to be finalized sometime in September 2007. The department must adopt or terminate the rulemaking within 180 days following either the publication of the notice of intended action or the date of the last public hearing, whichever occurs later. Since there is no certainty that EPA will publish final PM2.5 implementation guidance for attainment areas before September 5, 2007 (180 days since the date the last public hearing) the department has determined that it will modify the final rule to include language stating that the annual PM-10 standard will continue to be applicable for purposes of new source review only.

This change will allow the department to continue to implement the New Source Review program for PM2.5 as specified in EPA's 1997 "Interim Implementation of New Source Review Requirements for PM2.5." This memo instructs agencies to analyze the impacts of PM-10 emissions as a surrogate approach for controlling PM2.5 emissions until EPA can complete development of the appropriate tools and procedures for the direct evaluation of PM2.5 impacts.

Since the department continues to implement EPA's 1997 interim implementation guidance for PM_{2.5}, the department believes that this change from what was published in the original notice of intended action is within the scope of the original notice and is a logical outgrowth of EPA's comment received on the published notice.

Recommended Actions

The department will modify the text of the adoption in Chapter 28 to include language stating that the provisions of 71 Federal Register 61144-61233 (October 17, 2006) are adopted by reference, except that the annual PM-10 standard specified in 40 CFR Part 50.6(b) shall continue to be applied for purposes of implementation of new source permitting provisions in 567 IAC Chapters 22 and 33.